

ABSTRACT OF THE DISCLOSURE

[0030] A gravel packing method and apparatus are described where to set the packer; a ball is dropped to a seat that it isolated from the effects of formation pressures when trying to set the packer. This is accomplished by isolation of the gravel pack outlet port when setting the packer and locating the ball seat in a position where the effects of formation pressure are irrelevant. Additionally, by positioning the evacuation ports above a seal bore in the screen extension during circulation or squeeze to deposit gravel and further putting check valves in the evacuation ports, the evacuation step after circulation or squeeze can be accomplished without having to reposition the crossover. The crossover is supported from the packer and movement of the crossover away and back to the support from the packer operates a valve to allow squeezing when the valve is closed and circulating and reversing out when the valve is open. Thus, the gravel pack method and apparatus facilitates circulation, squeeze and reverse circulation in a single supported position.

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